






**Grade 4 Math: Weeks 19-24 January 14- February 22
2012-2013**

Standards		Lessons	Teacher Notes														
Standards marked with Red Keys are priority standards.																	
 4.NF.4 - Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. Learning Targets: I can use what I know about multiplication to multiply a fraction by a whole number. I can express any fraction as a multiple of a unit fraction. I can multiply any fraction by a whole number by creating an equivalent multiplication expression involving a unit fraction. I can solve word problems involving multiplication of a fraction by a whole number using visual fraction models and equations to represent the problem.	★ -	<i>To address the KCAS Standards, the following should be included in instruction:</i> Math Investigations: Unit 6 <ul style="list-style-type: none">3A.1-3A.33.1-3.7 Unit 7 <ul style="list-style-type: none">3.5A-3.5B Unit 4 <ul style="list-style-type: none">1.1-1.44.4-4.54.7															
 4.NF.6 - Use decimal notation for fractions with denominators 10 or 100. Learning Targets: I can write a fraction with a denominator of 10 or 100 as a decimal.	★	GAP LESSONS 4.MD.1 Conversion Cards Measurements Measurement and Geometry 4.MD.3 Figuring Areas Candy Bar Measurements Vocabulary partition, fraction, unit fraction, equivalent, denominator, numerator, benchmark fraction, visual fraction model, greater than, less than, equal to, line plot, decimal, tenth, hundredth, kilometer, meter, centimeter, kilogram, gram, pound, ounce, liter, milliliter, hour, minute, second, volume, mass, convert, measurement scale, formula, area, perimeter http://www.amathsdictionaryforkids.com/	KCAS Note 4.NF.6: Teacher should be intentional about asking students to write the decimals as a fraction.														
 4.NF.7 - Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model Learning Targets: I can compare two decimals to hundredths by reasoning about their size. I can recognize that comparisons of decimals are valid only when they refer to the same whole. I can use >, =, and < symbols to record my comparisons of two fractions and justify my conclusions.	★		KCAS Note 4.NF.7: When addressing this standard, add the following question to assess students understanding of the standard. <ul style="list-style-type: none">How do you know that comparisons of decimals are valid only when they refer to the same whole? (10x10 grid)														
 4.MD.1 – Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table Learning Targets: I can describe the relationship between sizes of measurement units in the same measurement system. I can convert measurements from larger units to smaller units within the same measurement system. I can record equivalent measurements in a two-column table.	★	<table><tr><th colspan="2">Formative Assessment Opportunities</th></tr><tr><td>4.NF.4</td><td></td></tr><tr><td>4.NF.6</td><td></td></tr><tr><td>4.NF.7</td><td></td></tr><tr><td>4.MD.1</td><td></td></tr><tr><td>4.MD.2</td><td></td></tr><tr><td>4.MD.3</td><td></td></tr></table>	Formative Assessment Opportunities		4.NF.4		4.NF.6		4.NF.7		4.MD.1		4.MD.2		4.MD.3		KCAS Note 4.MD.1: Units include: length (km, m, cm); mass (kg, g); weight (lb, oz); liquid volume (L, mL); time (hr, min, sec)
Formative Assessment Opportunities																	
4.NF.4																	
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4.MD.1																	
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4.MD.3																	
4.MD.2: Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	Ⓢ		KCAS Note 4.MD.2: In Unit 2, we learned to represent data in many ways. In this unit, we are solving problems using the information learned from that data.														

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Learning Targets: I can use the four operations to solve word problems involving simple fractions. I can use the four operations to solve word problems involving money with whole numbers and decimals. I can use the four operations to solve word problems involving liquid volumes. I can use the four operations to solve word problems involving masses of objects. I can use the four operations to solve word problems involving distances. I can use the four operations to solve word problems that involve converting measurmeents from larger units to smaller units. I can represent measurements with diagrams like number lines that have a measurement scale.		4.MD.4		
 4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. Learning Targets: I can use a formula to find the perimeter of a rectangle in real world and mathematical problems. I can use a formula to find the area of a rectangle in real world and mathematical problems.	★			KCAS Note 4.MD.3: In Unit 4, teacher must be intentional about teaching the concept of area and perimeter using the formulas. Students are required to only find the area and perimeter of rectangles.
4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. Learning Targets: I can make a line plot that displays measurements. I can solve problems using addition and subtraction of whole numbers using information from a line plot.	◎			